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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,534	06/23/2003	Alfred Commins	2863.2.1.3	1743

28049 7590 10/18/2005

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EXAMINER

SAETHER, FLEMMING

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/602,534	COMMINIS, ALFRED	
	<b>Examiner</b>	<b>Art Unit</b>	
	Flemming Saether	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21-40 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The spring to urge at least a full revolution is considered new matter.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Erikson (US Re.31,713). Erikson discloses an expansion washer (23-32) comprising a base (24) a slide (28) threadedly engaged with the base and defining a clearance hole (not labeled) and including a torsion spring (26) urging at least one revolution of rotation between the base and slide to increase the axial dimension. The base, slide, and spring defining an exterior envelope with its maximum diametral dimension defined by

the maximum width the slide (best see in Fig. 5) and the envelope expanding only in the axial direction.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-24, 28-32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reh (US 5,522,688) in view of Erikson. Reh also discloses an expandable washer including a base (14) and a slide (12) with a clearance hole (16) and a torsion coil spring (20) which is completely contained within the base and slide. There is further disclosed an engagement surface (34) angled in a range to include five and half degrees and a radially extending trigger (54) so that once the trigger is removed the base and slide would be urged apart. Reh does not disclose the engagement surface between the base and slide formed by a thread. As discussed above Erikson also discloses a base, slide and spring but in Erikson the engagement surface between the base and slide is formed by a thread. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to replace the engagement surface of Reh with a thread as disclosed in Erickson because the thread would allow the washer greater axial expansion. Whereas the current engagement surface in Reh would limit the axial expansion of the nut by allowing for only one

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rotation of the slide relative to base, the thread would allow for multiple rotations thus providing an improvement by facilitating greater axial expansion. The inclusion of a dry lubricant would have been recognized to reduce the friction between the threads to ease relative rotation, the stainless steel spring would have been recognized to inhibit corrosion of the spring and lastly, a screw would have been a recognized substitution for the pin in sheer applications.

Claims 25-27 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reh in view of Erikson as applied to claims 21-23 above, and further in view of Simon (US 5,340,258). Modified Reh does not disclose the threaded engagement means provided with a stop. Simon discloses a threaded engagement between a base (11') and a slide (10') which includes a stop (10b) formed as a snap ring. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the threaded engagement of modified Reh with a stop as disclosed in Simon in limit the rotation between the base and slide and prevent their separation.

### ***Response to Remarks***

The double patenting rejection has been obviated by the Terminal Disclaimer which has been approved.

Applicant argues the claims define over Erikson because claims have been amended to require the spring to "urge at least one revolution" which is not disclosed in

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Erikson. Applicant contends that in Erikson the spring is only required to compensate for small amounts of wear which is far less than one revolution and finally concludes that the clearance of the spring is insufficient to even enable a full revolution. In response, and without agreeing with applicant, the claims only require the spring to "urge" the revolution. There is no requirement that the spring actually be capable of producing the "at least one rotation" therefore, the mere fact that Erikson has a spring meets the limitations of the claims.

The previous response notwithstanding, applicant's conclusion that the spring of Erikson is incapable of providing a full revolution based upon the "Torsion spring Calculator and Formula" is too simplified because it does not take into account the number of coils of the spring. Indeed, the greater the number of the coils the less will be the inward deflection for a revolution. Furthermore, as applied to Erikson there is no indication that the spring shown in the drawings is not already in the deformed state. In fact, it would have to be in the deformed state for it to be operative to urge the rotation.

Applicant argues that combination Reh and Erikson also fails to disclose the spring to urge at least one revolution. In response, the examiner disagrees for the reason that Erikson teaches the limitation for the reasons as discussed above.

Also in regards to the combination, applicant argues that one would not be motivated to combine Reh with the threads of Erikson because the threads disclosed in

Erikson are too fine to accommodate the loads required of Reh. In response, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, the skilled artisan would have recognized to provide threads of adequate strength since it is known to make threads of appropriate size for their intended use.

Applicant lastly argues that the addition of Simon does not cure the alleged deficiencies of Erikson and Reh. In response, Simon is not relied upon to disclose the alleged deficiencies.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

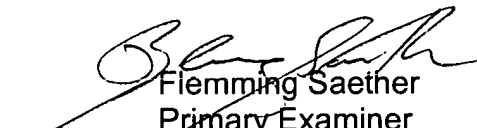
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 571-272-7071. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Flemming Saether  
Primary Examiner  
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